

## **REMARKS**

### **I. Status of the Claims**

Claims 1-11 are now present in this application. Claim 1 is independent.

Claim 12 has been previously canceled. Reconsideration of this application is respectfully requested.

### **II. Information Disclosure Citation**

The Examiner has not provided Applicant with an initialed copy of the PTO-SB08 form filed with the Information Disclosure Statement filed March 28, 2011. An initialed copy thereof is respectfully requested from the Examiner in the next Office Action.

### **III. Rejections under 35 U.S.C. §103**

The following Rejections (A)-(D) are pending:

- (A) Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oka (JP-07-090179) in view of Nalwa (Journal of Materials Science, 26 (1991) p. 1683-1690);
- (B) Claims 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oka in view of Nalwa and Kin (JP-11-185962);
- (C) Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oka in view of Nalwa and Cameron (WO 90/11317); and
- (D) Claims 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oka in view of Nalwa and further in view of Cameron and Kin.

These Rejections (A)-(D) are respectfully traversed.

A complete discussion of the Examiner's rejection is set forth in the Office Action, and is not being repeated here.

### **III – A. Legal Standard for Determining Prima Facie Obviousness**

MPEP 2141 sets forth the guidelines in determining obviousness. First, the Examiner has to take into account the factual inquiries set forth in *Graham v. John Deere*, 383 U.S. 1, 17, 148

USPQ 459, 467 (1966), which has provided the controlling framework for an obviousness analysis. The four *Graham* factors are:

- (a) determining the scope and content of the prior art;
- (b) ascertaining the differences between the prior art and the claims in issue;
- (c) resolving the level of ordinary skill in the pertinent art; and
- (d) evaluating any evidence of secondary considerations.

*Graham v. John Deere*, 383 U.S. 1, 17, 148 USPQ 459, 467 (1966).

Second, the Examiner has to provide some rationale for determining obviousness. MPEP 2143 sets forth some rationales that were established in the recent decision of *KSR International Co. v Teleflex Inc.*, 82 USPQ2d 1385 (U.S. 2007).

As the MPEP directs, all claim limitations must be considered in view of the cited prior art in order to establish a *prima facie* case of obviousness. *See* MPEP 2143.03.

### III – B. As to End-Capping

At page 4, first paragraph of the outstanding Office Action, the Examiner states:

Oka fails to mention a representative for R1 or the end-capping group, R3. The applicant claims R1 can be hydrogen and R3 as substituted or unsubstituted aryl.

For this feature, the Examiner relies on Nalwa. However, Applicants respectfully submit that the artisan would have no reason or rationale to look to Nalwa to modify the teachings of Oka.

The polyaniline-polyimide complex of Oka is produced from a complex salt precursor prepared by salt-forming reaction of polyaniline and polyamic acid.

Upon the salt-forming reaction, it is clear that the terminal amino group in the polyaniline serves an important role in forming the salt.

Considering this point, a person skilled in the art would not be able to cap the terminal amino group with a phenyl group, even though Nalwa discloses that an oligoanilines can be end-capped with a phenyl group.

As such, the references of Oka and Nalwa are not combinable. Since all of Rejections (A)-(D) rely on this combination, the Rejections (A)-(D) are not tenable.

III – C. As to Molecular Weight

Oka discusses the molecular weight of the polyaniline in paragraph [0007] which is as follows:

[0007] In this invention, this meltable type poly aniline needs the number average molecular weights 2000-500000 and to have number average molecular weight] of measurement and polystyrene conversion preferably at 5000-250000[GPC (N-methyl-2-pyrrolidone solvent). **If a number average molecular weight of poly aniline becomes lower than 2000,** the flexibility of a poly aniline polyamide acid complex salt type precursor and a poly aniline polyimide complex obtained eventually will be spoiled, and **it will become difficult to obtain a self-standing film, a fiber, and other molded products.** When 500000 is exceeded, solubility over a solvent becomes low and becomes on the other hand, less preferred in respect of preparation of a poly aniline polyamide acid complex salt type precursor or processing. (Machine translation from JPO website). (Emphasis added).

Considering the highlighted description, a person skilled in the art would select polyaniline having a number average molecular weight of more than 2,000 in case of forming films from the complex of Oka.

On the contrary, the inventive charge transporting varnish containing the charge transporting oligoaniline having a number average molecular weight of 250 to 800, has advantages not seen in the polyaniline of Oka. Specifically, using the inventive charge transporting varnish containing the charge transporting oligoaniline having a number average molecular weight of 250 to 800 there can be obtained a charge transporting thin film which has high uniformity and flatness and excellent mechanical strength, heat resistance and transparency. This thin film can be formed by various methods including spin coating, printing, spraying and the like methods.

Furthermore, Applicants respectfully submit that the teachings of Cameron and Kin fail to cure the deficiencies of Oka and Nalwa as discussed above.

As such, reconsideration and withdrawal of Rejections (A)-(D) are respectfully requested.

#### **IV. Conclusion**

All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding rejections and that they be withdrawn. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance.


In view of the above amendment, Applicant believes the pending application is in condition for allowance.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Garth M. Dahlen, PhD, Registration No. 43,575 at the telephone number of the undersigned below to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Director is hereby authorized in this, concurrent, and future replies to charge any fees required during the pendency of the above-identified application or credit any overpayment to Deposit Account No. 02-2448.

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Respectfully submitted,

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